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## Bioluminescence Imaging of Stem Cell-Based Therapeutics for Vascular Regeneration

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### Public Summary:

Stem cell-based therapeutics show promise for treatment of vascular diseases. However, the survival of the cells after in vivo injection into diseased tissues remains a concern. In the advent of non-invasive optical imaging techniques such as bioluminescence imaging (BLI), cell localization and survival can be easily monitored over time. This approach has recently been applied towards monitoring stem cell treatments for vascular regeneration of the coronary or peripheral arteries. In this review, we will describe the application of BLI for tracking transplanted stem cells and associating their viability with therapeutic efficacy, in preclinical disease models of vascular disease.

### Scientific Abstract:

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